



102-08640-MS/CJS
July 7, 2023

**Palo Verde
Nuclear Generating Station**
P.O. Box 52034
Phoenix, AZ 85072
Mail Station 7636
Tel: (623) 393-5753

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**Subject: Palo Verde Nuclear Generating Station Unit 2
Docket No. STN 50-529
Fourth 10-Year Interval, Second Period
Owner's Activity Report Number 2R24**

Pursuant to Title 10 of the Code of Federal Regulations 50.55a and in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code Case N-532-5, *Repair/Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission Section XI, Division 1*, Arizona Public Service Company hereby submits the Owner's Activity Report (Form OAR-1) for Unit 2 refueling outage 24 (2R24). The outage ended on May 13, 2023.

No commitments are being made to the NRC by this letter. Should you need further information regarding this submittal, please contact me at (623) 393-5753.

Sincerely,

Cox, Matthew
S(Z05628)

Digitally signed by Cox,
Matthew S(Z05628)
Date: 2023.07.07 15:01:05
-07'00'

Matthew S. Cox
Department Leader, Nuclear Regulatory Affairs

MSC/CJS/cr

Enclosure: Unit 2 Twenty-Fourth Refueling Outage Owner's Activity Report, Report 2R24

cc: R. J. Lewis Acting NRC Region IV Regional Administrator
S. P. Lingam NRC NRR Project Manager for PVNGS
L. N. Merker NRC Senior Resident Inspector for PVNGS

ENCLOSURE

Unit 2

Twenty-Fourth Refueling Outage Owner's Activity Report

Report 2R24

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: 2R24

Plant: Palo Verde Nuclear Generating Station, 5801 S. Wintersburg Road, Tonopah, Arizona 85354-7529

Unit No.: 2 Commercial service date: Sep 19, 1986 Refueling Outage No.: 24
(if applicable)

Current inspection interval IWB, IWC, IWD, IWF = 4th / IWE = 3rd / IWL = 3rd / S.P.T. = 4th
(1st, 2nd, 3rd, 4th, other)

Current inspection period IWB, IWC, IWD, IWF = 2nd / IWE = 2nd / IWL = 1st / S.P.T. = 2nd
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 2013 Edition (IWE = 2007 Ed., '08 Ad.)

Date and revision of inspection plans ISI=9/16/21 R1, SPT=6/21/18 R0, IWE=10/3/18 R0, IWL=6/17/22 R0

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans 2013 Edition

Code Cases used for inspection and evaluation:
N-532-5, N-716-1, N-722-1, N-729-6, N-770-5
(if applicable)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of U2R24 conform to the requirements of Section XI.
(refueling outage number)

Signed **Folley, Roy C(Z07131)** Digitally signed by Folley, Roy C(Z07131) Date: 2023.07.05 16:07:15 -07'00' Date: Jul 5, 2023

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by _____* of Hartford, Connecticut _____ have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Hogstrom, Robert (YH2450) Digitally signed by Hogstrom, Robert (YH2450) Date: 2023.07.05 16:18:32 -07'00' * The Hartford Steam Boiler Inspection and Insurance Co.
Commissions N.B. 9685 "C, I, N, R"
(Inspector's Signature) National Board, State, Province, and Endorsements

Date: Jul 5, 2023

Table 1

Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service

Examination Category and Item Number	Item Description	Evaluation Description
None	None	None

Table 2

Abstract of 2R24 Repair/Replacement Activities Required for Continued Service

Code Class	Component ID	Description of Work	Date Complete	Repair/Replacement Plan Number
1	2JRCEPSV0200	PRESSURIZER SAFETY RELIEF VALVE Replace the pressurizer safety relief valve with a reconditioned spare	5/09/2023	5405377-0
1	2JRCEPSV0201	PRESSURIZER SAFETY RELIEF VALVE Replace the pressurizer safety relief valve with a reconditioned spare	5/09/2023	5405378-0
1	2JRCEPSV0202	PRESSURIZER SAFETY RELIEF VALVE Replace the pressurizer safety relief valve with a reconditioned spare	5/09/2023	5405379-0
1	2JRCEPSV0203	PRESSURIZER SAFETY RELIEF VALVE. Replace the pressurizer safety relief valve with a reconditioned spare	5/09/2023	5405380-0
1	2MRCEE01B	REPLACEMENT STEAM GENERATOR Replace retainer plate due to wear.	5/09/2023	5405371-0
1	2MRCEE01A	REPLACEMENT STEAM GENERATOR Install Westinghouse mechanical tube plugs in steam generator 2MRCEE01A "HOT" leg	4/28/2023	5419140-0
1	2MRCEE01A	REPLACEMENT STEAM GENERATOR Install Westinghouse mechanical tube plugs in steam generator 2MRCEE01A "COLD" leg.	4/28/2023	5419141-0
1	2MRCEE01B	REPLACEMENT STEAM GENERATOR Install Westinghouse mechanical tube plugs in steam generator 2MRCEE01A "HOT" leg	4/28/2023	5419142-0
1	2MRCEE01B	REPLACEMENT STEAM GENERATOR Install Westinghouse mechanical tube plugs in steam generator 2MRCEE01A "COLD" leg	4/28/2023	5419143-0
1	2PSIBV532	B HPSI INJ TO LOOP 2 CHECK VALVE Weld replace valve with substitute Borg Warner model 77700.	5/09/2023	5245515-0
1	2JRCBHV108	PRESSURIZER VENT VALVE TO RDT Remove and weld replace SOV RC-108 valve body	5/04/2023	5405454-0
2	2JSGBUV500R	S/G #2 BLOWDOWN CTNMT ISOL VALVE Weld repair the 1/8" fillet weld pin hole leak between valve bonnet and packing leak off port plug.	3/05/2022	5413979-0

Table 2

Abstract of 2R24 Repair/Replacement Activities Required for Continued Service

Code Class	Component ID	Description of Work	Date Complete	Repair/Replacement Plan Number
2	2SI112H00F	SIB-P02 TO RWT RESTRAINT Replace broken U-Bolt	5/05/2023	5532107-0
3	2PSPAL080	ESP PP SPAP01 TO DG CLG WTR HT EXCH DGA-E01 Weld repair spool # 10 per Engineering weld map.	4/24/2023	4884332-11
3	2SI199H00A	SUPPORT 00A ON LINE SI199 SPOOL N00J Replace nut of U-bolt Item 5 of 13-SI- 199-H-00A per EDC 2023-00223	5/08/2023	4884350-0
3	2MDGBY18	TURBOCHARGER COOLING OUTEXP JOINT Perform base metal repairs of expansion joint	3/25/2022	5303385-10
3	2MDGBY019	TURBO COOLING SUPPLY EXPJOINT Perform Base Metal Repairs of expansion joint	3/25/2022	5303386-10
3	2MDGBY024	TURBO COOLING OUTLET EXPJOINT Perform Base Metal Repairs of expansion joint	3/25/2022	5303386-10
3	2PSPBL032	SP PUMP SPB P01 TO DG CLG WTR HT EXCH DGB-E01 SPOOL 014 Perform base metal repair to pipe spool	3/25/2022	5303426-5
3	2PSPBL032	SP PUMP SPB P01 TO DG CLG WTR HT EXCH DGB-E01 SPOOL 015 Perform base metal repair to pipe spool	3/25/2022	5303426-5
3	2PSPBL049	DG CLG WTR HT EXCH DGB-E01 TO TRAIN B SPRAY POND SPOOL 001 Base metal repair to pipe spool	3/25/2022	5303426-5
3	2PSPBL104	ESS SPRAY POND P SPB-P01 TO LUBE OIL CLR DGBE04 SPOOL 003 Perform base metal repair to pipe spool	3/25/2022	5303426-5
3	2PSPB106	LUBE OIL CLR DGB-E04 TO SPRAY POND TRAIN B SPOOL 001 Perform base metal repair to pipe spool	3/25/2022	5303426-5
3	2PSPB106	LUBE OIL CLR DGBE04 TO SPRAY POND TRAIN B SPOOL 004 Base metal repair to pipe spool	3/25/2022	5303426-5
3	2MDGBE04	EDG LUBE OIL COOLER Weld repair of corroded areas	3/25/2022	5303431-0

Table 2

Abstract of 2R24 Repair/Replacement Activities Required for Continued Service

Code Class	Component ID	Description of Work	Date Complete	Repair/Replacement Plan Number
3	2MDGBE05	EDG JACKET WATER COOLER Weld repair of corroded areas	3/25/2022	5303431-0
3	2MDGBE01A/B	EDG INTERCOOLER CROSS CONNECT SPOOLS (5, 6, 7, and 8) Weld repair of corroded areas	3/25/2022	5303431-0
3	2MDGBE01A	EDG INTERCOOLER A Weld repair of corroded areas	3/25/2022	5303431-0
3	2MDGBE01B	EDG INTERCOOLER B Weld repair of corroded areas	3/25/2022	5303431-0
3	2MEWAE01	ECWS HTEXCH A Perform base material repairs to the heat exchanger	4/25/2023	5405244-1